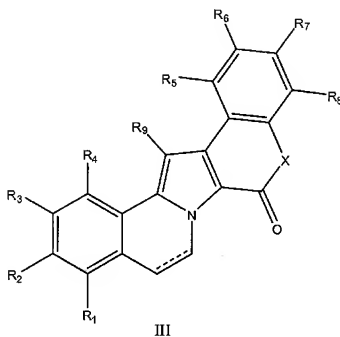


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A compound of the general formula III:



wherein X is selected from the group consisting of NH, O and S;

wherein R₁, R₂, R₃, R₄, R₅, R₆, R₇, and R₈ are each independently selected from the group consisting of H, OH, OR', SH, SR', SOR', SO₂R', NHR', N(R')₂, N=R', NHCOR', N(COR')₂, NHSO₂R', NO₂, PO(R')₂, PO₂R', C(=O)H, C(=O)R', CO₂H, CO₂R', OPO(R')₂, OPO₂R', OC(=O)H, OC(=O)R', N=C(R')₂, substituted or unsubstituted C₁-C₁₂ alkyl, substituted or unsubstituted C₁-C₁₂ haloalkyl, substituted or unsubstituted C₂-C₁₂ alkenyl, substituted or

unsubstituted C₂-C₁₂ alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl and substituted or unsubstituted heteroaromatic;

wherein R₉ is independently selected from the group consisting of H, OH, OR', SH, SR', SOR', SO₂R', NHR', N(R')₂, N=R', NHCOR', N(COR')₂, NHSO₂R', NO₂, PO(R')₂, PO₂R', C(=O)H, C(=O)R', CO₂H, CO₂R', OPO(R')₂, OPO₂R', OC(=O)H, OC(=O)R', N=C(R')₂, substituted or unsubstituted C₁-C₁₂ alkyl, substituted or unsubstituted C₁-C₁₂ haloalkyl, substituted or unsubstituted C₂-C₁₂ alkenyl, substituted or unsubstituted C₂-C₁₂ alkynyl, substituted or unsubstituted aralkyl, substituted or unsubstituted heteroaromatic, ~~and halogen~~ bromine, and iodine;

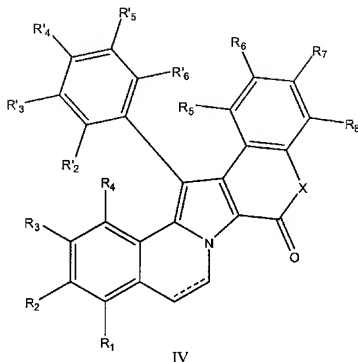
wherein each of the R' groups is independently selected from the group consisting of H, OH, NO₂, NH₂, SH, CN, halogen, C(=O)H, C(=O)CH₃, CO₂H, C(=O)R', substituted or unsubstituted C₁-C₁₈ alkyl, substituted or unsubstituted C₂-C₁₈ alkenyl, substituted or unsubstituted C₂-C₁₈ alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted C₁-C₁₈ alkoxy, substituted or unsubstituted C₁-C₁₈ aminoalkyl, substituted or unsubstituted C₁-C₁₈ aminoacid or aminoacids chain, substituted or unsubstituted C₁-C₁₈ thioalkyl, substituted or unsubstituted C₁-C₁₈ alkylsulfinyl, substituted or unsubstituted C₁-C₁₈ alkylsulfonyl;

wherein the pairs of groups R₁ and R₂, R₂ and R₃, R₃ and R₄, R₃ and R₉, R₄ and R₉, R₉ and R₅, R₉ and R₆, or R₆ and R₇, R₇ and R₈ may be joined into a carbocyclic or heterocyclic ring system;

and the dotted line represents a single or double bond;

or a pharmaceutically acceptable salt or stereoisomer thereof.

2. (previously presented) A compound of the general formula **IV**:



wherein X is selected from the group consisting of NH, O and S;

wherein R₁, R₂, R₃, R₄, R₅, R₆, R₈, R'₂, R'₃, R'₄, R'₅, and R'₆ are each independently selected from the group consisting of H, OH, OR', SH, SR', SOR', SO₂R', NHR', N(R')₂, N=R', NHCOR', N(COR')₂, NHSO₂R', NO₂, PO(R')₂, PO₂R', C(=O)H, C(=O)R', CO₂H, CO₂R', OPO(R')₂, OPO₂R', OC(=O)H, OC(=O)R', N=C(R')₂, substituted or unsubstituted C₁-C₁₂ alkyl, substituted or unsubstituted C₁-C₁₂ haloalkyl, substituted or unsubstituted C₂-C₁₂ alkenyl, substituted or unsubstituted C₂-C₁₂ alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl and substituted or unsubstituted heteroaromatic;

wherein R_7 is independently selected from the group consisting of OR' , SH , SR' , SOR' , SO_2R' , NHR' , $N(R')_2$, $N=R'$, $NHCOR'$, $N(COR')_2$, $NHSO_2R'$, NO_2 , $PO(R')_2$, PO_2R' , $C(=O)H$, $C(=O)R'$, CO_2H , CO_2R' , $OPO(R')_2$, OPO_2R' , $OC(=O)H$, $OC(=O)R'$, $N=C(R')_2$, substituted or unsubstituted C_1 - C_{12} alkyl, substituted or unsubstituted C_1 - C_{12} haloalkyl, substituted or unsubstituted C_2 - C_{12} alkenyl, substituted or unsubstituted C_2 - C_{12} alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl and substituted or unsubstituted heteroaromatic;

with the proviso that R_7 is not Me, Et, Pr, COMe, OH, OMe, OAc, OⁱPr or OBn when X is O;

wherein each of the R' groups is independently selected from the group consisting of H, OH, NO_2 , NH_2 , SH , CN, halogen, $C(=O)H$, $C(=O)R'$, $C(=O)CH_3$, CO_2H , substituted or unsubstituted C_1 - C_{18} alkyl, substituted or unsubstituted C_2 - C_{18} alkenyl, substituted or unsubstituted C_2 - C_{18} alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted C_1 - C_{18} alkoxy, substituted or unsubstituted C_1 - C_{18} aminoalkyl, substituted or unsubstituted C_1 - C_{18} aminoacid or aminoacids chain, substituted or unsubstituted C_1 - C_{18} thioalkyl, substituted or unsubstituted C_1 - C_{18} alkylsulfinyl, substituted or unsubstituted C_1 - C_{18} alkylsulfonyl;

wherein the pairs of groups R_1 and R_2 , R_2 and R_3 , R_3 and R_4 , R_6 and R_7 , or R_7 and R_8 may be joined into a carbocyclic or heterocyclic ring system;

and the dotted line represents a single or double bond;

or a pharmaceutically acceptable salt or stereoisomer thereof.

3. (previously presented) A compound according to claim 1 or 2 wherein X is O or NH.

4. (previously presented) A compound according to claim 1 or 2 wherein X is O.
5. (previously presented) A compound according to claim 1 or 2 wherein the dotted line is a double bond.
6. (previously presented) A compound according to claim 1 wherein each of R_1 - R_8 is independently selected from H, OR' , and $OC(=O)R'$.
7. (previously presented) A compound according to claim 1 or 2 wherein R_3 is selected from the group consisting of H, OH, and OR' , with the proviso that when R_3 is OR' , then R' is selected from a substituted or unsubstituted C_1 - C_{18} alkyl.
8. (previously presented) A compound according to claim 1 or 2 wherein R_4 , R_5 , R_6 and R_8 are each independently selected from the group consisting of H and OR' , with the proviso that when R_4 , R_5 , R_6 or R_8 is OR' , then R' is selected from a substituted or unsubstituted C_1 - C_{18} alkyl.
9. (previously presented) A compound according to claim 8 wherein R_4 , R_5 and R_8 are H.
10. (previously presented) A compound according to claim 1 wherein R_1 , R_2 and R_7 are each independently selected from the group consisting of H, OH, OR' , $OC(=O)R'$, SO_2R' , $PO(R')$, substituted or unsubstituted C_1 - C_{12} alkyl, NO_2 , and NH_2 , with the proviso that when R_1 , R_2 or R_7 are OR' , then R' is selected from a substituted or unsubstituted C_1 - C_{18} alkyl.

11. (previously presented) A compound according to claim 10 wherein R_1 , R_2 and R_7 are $OC(=O)R'$ wherein R' is a substituted or unsubstituted aminoacid or aminoacids chain.

12. (previously presented) A compound according to claim 2 wherein R'_2 , R'_3 and R'_6 are each independently selected from the group consisting of H and OR' , wherein R' is a substituted or unsubstituted C_1 - C_{18} alkyl.

13. (previously presented) A compound according to claim 2 wherein R'_5 is selected from the group consisting of H and OR' , wherein R' is a substituted or unsubstituted C_1 - C_{18} alkyl.

14. (previously presented) A compound according to claim 2 wherein R'_4 is selected from the group consisting of H, OH, OR' , $OC(=O)R'$, SO_2R' , $PO(R')_2$, substituted or unsubstituted C_1 - C_{12} alkyl, NO_2 , and NH_2 , with the proviso that when R'_4 is OR' , then R' is selected from a substituted or unsubstituted C_1 - C_{18} alkyl.

15. (currently amended) A compound according to claim 14 wherein R'_4 is $OC(=O)R'$ wherein R'_4 is OR' and wherein R' is a substituted or unsubstituted aminoacid or aminoacids chain.

16. (previously presented) A compound according to claim 1 or 2 wherein at least one of R_1 - R_8 and R'_2 - R'_6 is not H, OH, OCH_3 , and SO_3Na .

17. (previously presented) A pharmaceutical composition comprising a compound as defined in

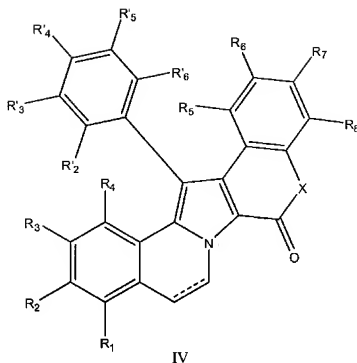
claim 1 or 2 or a pharmaceutically acceptable salt or stereoisomer thereof, and a pharmaceutically acceptable diluent or carrier.

18. (canceled)

19. (previously presented) A method of treating a tumor which comprises administering to a human an effective amount of a compound as defined in claim 1 or 2 or a pharmaceutically acceptable salt or stereoisomer thereof.

20. (previously presented) A method of inhibiting topoisomerase I comprising administering to a human an amount effective for inhibiting topoisomerase I of a compound as defined in claim 1 or 2 or a pharmaceutically acceptable salt or stereoisomer thereof.

21. (previously presented) A compound of the general formula IV:



wherein X is selected from the group consisting of NH, O and S;

wherein R_1 , R_2 , R_3 , R_4 , R_5 , R_6 , R_8 , R'_2 , R'_3 , R'_4 , R'_5 , and R'_6 are each independently selected from the group consisting of H, OH, OR', SH, SR', SOR', SO₂R', NHR', N(R')₂, N=R', NHCOR', N(COR')₂, NHSO₂R', NO₂, PO(R')₂, PO₂R', C(=O)H, C(=O)R', CO₂H, CO₂R', OPO(R')₂, OPO₂R', OC(=O)H, OC(=O)R', N=C(R')₂, substituted or unsubstituted C₁-C₁₂ alkyl, substituted or unsubstituted C₁-C₁₂ haloalkyl, substituted or unsubstituted C₂-C₁₂ alkenyl, substituted or unsubstituted C₂-C₁₂ alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl and substituted or unsubstituted heteroaromatic;

wherein R_7 is independently selected from the group consisting of OR', SH, SR', SOR', SO₂R', NHR', N(R')₂, N=R', NHCOR', N(COR')₂, NHSO₂R', NO₂, PO(R')₂, PO₂R', C(=O)H, CO₂H, CO₂R', OPO(R')₂, OPO₂R', OC(=O)H, OC(=O)R', N=C(R')₂, substituted or unsubstituted C₁-C₁₂

haloalkyl, substituted or unsubstituted C_2 - C_{12} alkenyl, substituted or unsubstituted C_2 - C_{12} alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl and substituted or unsubstituted heteroaromatic;

with the proviso that R_7 is not OH, OMe, OAc, OⁱPr or OBn when X is O;

wherein each of the R' groups is independently selected from the group consisting of H, OH, NO_2 , NH_2 , SH, CN, halogen, $C(=O)H$, $C(=O)CH_3$, CO_2H , $C(=O)R'$, substituted or unsubstituted C_1 - C_{18} alkyl, substituted or unsubstituted C_2 - C_{18} alkenyl, substituted or unsubstituted C_2 - C_{18} alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted C_1 - C_{18} alkoxy, substituted or unsubstituted C_1 - C_{18} aminoalkyl, substituted or unsubstituted C_1 - C_{18} aminoacid or aminoacids chain, substituted or unsubstituted C_1 - C_{18} thioalkyl, substituted or unsubstituted C_1 - C_{18} alkylsulfinyl, substituted or unsubstituted C_1 - C_{18} alkylsulfonyl;

wherein the pairs of groups R_1 and R_2 , R_2 and R_3 , R_3 and R_4 , R_6 and R_7 , or R_7 and R_8 may be joined into a carbocyclic or heterocyclic ring system;

and the dotted line represents a single or double bond;

or a pharmaceutically acceptable salt or stereoisomer thereof.

22. (previously presented) A compound according to claim 7 wherein R_3 is methoxy.

23. (previously presented) A compound according to claim 13 wherein R'_5 is methoxy.

24. (previously presented) A compound according to claim 16 wherein at least two of R_1 - R_8 and R'_2 - R'_6 are not H, OH, OCH_3 , or SO_3Na .

25. (previously presented) A compound according to claim 11 wherein R' is an aminoacid or aminoacids chain substituted with a cationic group.

26. (previously presented) A compound according to claim 15 wherein R' is an aminoacid or aminoacids chain substituted with a cationic group.

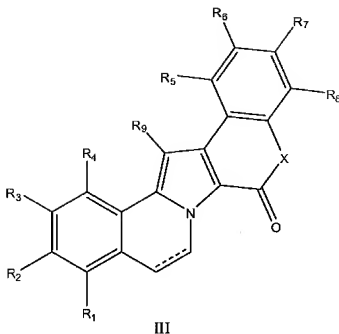
27. (previously presented) A compound according to claim 2 or 21 wherein each of R_1 - R_6 and R_8 is independently selected from H, OR' , and $OC(=O)R'$ and wherein R_7 is selected from OR' and $OC(=O)R'$.

28. (previously presented) A compound according to claim 2 or 21 wherein R_1 and R_2 are each independently selected from the group consisting of H, OH, OR' , $OC(=O)R'$, SO_2R' , $PO(R')_2$, substituted or unsubstituted C_1 - C_{12} alkyl, NO_2 , and NH_2 , with the proviso that when R_1 or R_2 are OR' , then R' is selected from a substituted or unsubstituted C_1 - C_{18} alkyl; and

wherein R_7 is selected from the group consisting of OR' , $OC(=O)R'$, SO_2R' , $PO(R')_2$, substituted or unsubstituted C_1 - C_{12} alkyl, NO_2 , and NH_2 , with the proviso that when R_7 is OR' , then R' is selected from a substituted or unsubstituted C_1 - C_{18} alkyl group.

29. (previously presented) A compound according to claim 12 wherein R'_2 , R'_3 , and R'_6 are H.

30. (new) A compound of the general formula **III**:



wherein X is selected from the group consisting of NH, O and S;

wherein R₁, R₂, R₃, R₄, R₅, R₆, R₇, and R₈ are each independently selected from the group consisting of H, OH, OR', SH, SR', SOR', SO₂R', NHR', N(R')₂, N=R', NHCOR', N(COR')₂, NHSO₂R', NO₂, PO(R')₂, PO₂R', C(=O)H, C(=O)R', CO₂H, CO₂R', OPO(R')₂, OPO₂R', OC(=O)H, OC(=O)R', N=C(R')₂, substituted or unsubstituted C₁-C₁₂ alkyl, substituted or unsubstituted C₁-C₁₂ haloalkyl, substituted or unsubstituted C₂-C₁₂ alkenyl, substituted or unsubstituted C₂-C₁₂ alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl and substituted or unsubstituted heteroaromatic;

wherein R₉ is independently selected from the group consisting of H, OH, OR', SH, SR', SOR', SO₂R', NHR', N(R')₂, N=R', NHCOR', N(COR')₂, NHSO₂R', NO₂, PO(R')₂, PO₂R', C(=O)H, C(=O)R', CO₂H, CO₂R', OPO(R')₂, OPO₂R', OC(=O)H, OC(=O)R', N=C(R')₂, substituted or unsubstituted C₁-C₁₂ alkyl, substituted or unsubstituted C₁-C₁₂ haloalkyl, substituted or

unsubstituted C₂-C₁₂ alkenyl, substituted or unsubstituted C₂-C₁₂ alkynyl, substituted or unsubstituted aralkyl, substituted or unsubstituted heteroaromatic, and halogen;

wherein each of the R' groups is independently selected from the group consisting of H, OH, NO₂, NH₂, SH, CN, halogen, C(=O)H, C(=O)CH₃, CO₂H, C(=O)R', substituted or unsubstituted C₁-C₁₈ alkyl, substituted or unsubstituted C₂-C₁₈ alkenyl, substituted or unsubstituted C₂-C₁₈ alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted C₁-C₁₈ alkoxy, substituted or unsubstituted C₁-C₁₈ aminoalkyl, substituted or unsubstituted C₁-C₁₈ aminoacid or aminoacids chain, substituted or unsubstituted C₁-C₁₈ thioalkyl, substituted or unsubstituted C₁-C₁₈ alkylsulfinyl, substituted or unsubstituted C₁-C₁₈ alkylsulfonyl;

wherein the pairs of groups R₁ and R₂, R₂ and R₃, R₃ and R₄, R₃ and R₉, R₄ and R₉, R₉ and R₅, R₉ and R₆, or R₆ and R₇, R₇ and R₈ may be joined into a carbocyclic or heterocyclic ring system;

and the dotted line represents a single or double bond;

or a pharmaceutically acceptable salt or stereoisomer thereof.